

AMENDMENTS TO THE CLAIMS

1-17. (Cancelled).

18. (Currently amended) A punch for cutting a hole in a workpiece, said workpiece having a pilot hole provided therethrough, said punch comprising:

a punch body having a ~~an axial~~ bore extending at least partially therethrough;

at least one piercing portion extending from said punch body a predetermined distance for piercing the workpiece;

at least one cutting portion extending from said punch body a predetermined distance for shearing the workpiece after said at least one piercing portion has pierced the workpiece;
and

a an insert member removably secured ~~positioned~~ within said ~~axial~~ bore of said punch body which is configured to center for centering said punch body with the pilot hole of the workpiece, said insert member having a bore therethrough which is in communication with said bore of said punch body such that a tool can be positioned through said bore of said insert member and within said bore of said punch body in order to manipulate said punch into cutting the hole in the workpiece, said insert member extending further away from said punch body than said at least one piercing portion such that at least a portion of said insert member ~~engages~~ enters the pilot hole of the workpiece prior to said at least one piercing portion piercing the workpiece.

19. (Cancelled).

20. (Currently amended) A punch as defined in claim ~~19~~ 18, wherein said insert member is cylindrical.

21. (Currently amended) A punch as defined in claim ~~19~~ 18, wherein said insert member has first and second ends, said first end of said insert member being ~~fastened~~ removably secured within ~~into~~ said ~~axial~~ bore of said punch body, said second end of said insert member having a chamfered edge, said second end extending further away from said punch body than said at least one piercing portion.

22. (Original) A punch as defined in claim 21, wherein said edge is chamfered between approximately a 30 degree angle and a 45 degree angle.

23. (Currently amended) A punch as defined in claim 21, wherein said second end of said insert member extends approximately 1/16 inch further away from said punch body than said at least one piercing portion.

24. (Currently amended) A punch as defined in claim 21, wherein said punch body has ~~an axial~~ a counterbore in communication with said ~~axial~~ bore, said first end of said insert member being ~~fastened~~ removably secured within ~~into~~ said ~~axial~~ counterbore of said punch body.

25. (Previously presented) A punch as defined in claim 18, wherein said at least one piercing portion comprises a pair of piercing portions, said pair of piercing portions are positioned opposite each other along an edge of said punch body.

26. (Currently amended) A punch as defined in claim 25, wherein said at least one cutting portion comprises a pair of cutting portions, said pair of cutting portions are positioned opposite each other and extend generally from one of said piercing portions to said other of said piercing portions, said cutting portions have cutting edges along said edge of said punch body and extend from said edge of said punch body to said ~~axial~~ bore of said punch body.

27. (Currently amended) A one-piece punch for cutting a hole in a workpiece, said workpiece having a pilot hole provided therethrough, said punch comprising:

a punch body having ~~an axial~~ a bore at least partially therethrough;

at least one piercing portion extending from said punch body a predetermined distance for piercing the workpiece;

at least one cutting portion extending from said punch body a predetermined distance for shearing the workpiece after said at least one piercing portion has pierced the workpiece; and

~~at least one projection~~ a pair of projections extending from said punch body a predetermined distance and positioned generally opposite of each other and adjacent to said ~~axial~~ bore of said punch body, said ~~at least one projection~~ pair of projections capable of centering said punch body with the pilot hole of the workpiece, said ~~at least one projection~~ pair of projections extending further away from said punch body than said at least one piercing portion such that at least a portion of said ~~at least one projection engages~~ pair of projections enters the pilot hole of the workpiece prior to said at least one piercing portion piercing the workpiece.

28. (Currently amended) A one-piece punch as defined in claim 27, wherein said at least one piercing portion comprises first and second piercing portions, said at least one cutting portion comprises first and second cutting portions, and said ~~at least one projection comprises~~ pair of projections comprise first and second projections, said first piercing portion has first and second surfaces which meet to form a point, said first surface of said first piercing portion slopes downwardly from said point of said first piercing portion toward said first projection and said first cutting portion, said second surface of said first piercing portion extends axially downwardly to said second cutting portion, said second piercing portion has first and second surfaces which meet to form a point, said first surface of said second piercing portion slopes downwardly from said point of said second piercing portion toward said second projection and said second cutting portion, said second surface of said second piercing portion extends axially downwardly to said first cutting portion.

29. (Currently amended) A one-piece punch as defined in claim 28, wherein said first cutting portion slopes downwardly from said first surface of said first piercing portion to said second surface of said second piercing portion, and wherein said second cutting portion slopes downwardly from said first surface of said second piercing portion to said second surface of said first piercing portion, such that said first and second cutting portions slope downwardly in opposite directions.

30. (Currently amended) A one-piece punch as defined in claim 29, wherein said first and second cutting portions have outer peripheral edges which form cutting edges on opposite sides of said punch body.

31. (Currently amended) A one-piece punch as defined in claim 28, wherein said first projection tapers downwardly to said first surface of said first piercing portion, and wherein said second projection tapers downwardly to said first surface of said second piercing portion.

32-36. (Cancelled).

37. (Previously presented) A punch for cutting a hole in a workpiece, said workpiece having a pilot hole provided therethrough, said punch comprising:

a punch body having an axial bore therethrough;

first and second piercing portions extending from said punch body a predetermined distance for piercing the workpiece;

first and second projections extending from said punch body a predetermined distance and positioned opposite of each other and adjacent to said axial bore, said first and second projections capable of centering said punch body with the pilot hole of the workpiece, said first and second projections extending further away from said punch body than said first and second piercing portions such that said first and second projections engage the pilot hole of the workpiece prior to said first and second piercing portions piercing the workpiece; and

first and second cutting portions extending from said punch body a predetermined distance for shearing the workpiece after said at least one piercing portion has pierced the workpiece,

wherein said first piercing portion has first and second surfaces which meet to form a point, said first surface of said first piercing portion slopes downwardly from said point of said first piercing portion toward said axial bore and said first cutting portion, said second surface of said first piercing portion extending axially downwardly to said second cutting portion, and wherein said second piercing portion has first and second surfaces which meet to form a point, said first surface of said second piercing portion slopes downwardly from said point of said second piercing portion toward said axial bore and said second cutting portion, said second surface of said second piercing portion extends axially downwardly to said first cutting portion.

38. (Currently amended) A punch for cutting a hole in a workpiece, said workpiece having a pilot hole provided therethrough, said punch comprising:

a punch body having ~~an axial~~ a bore extending at least partially therethrough;

first and second piercing portions extending from said punch body a predetermined distance for piercing the workpiece;

an insert member ~~positioned~~ removably secured within said ~~axial~~ bore of said punch body ~~for centering~~ which is configured to center said punch body with the pilot hole of the workpiece, said insert member having a bore therethrough which is in communication with said bore of said punch body such that a tool can be positioned through said bore of said insert member and within said bore of said punch body in order to manipulate said punch into cutting the hole in the workpiece, said insert member extending further away from said punch body than said first and second piercing portions such that said insert member engages the pilot hole of the workpiece prior to said first and second piercing portions piercing the workpiece; and

first and second cutting portions extending from said punch body a predetermined distance for shearing the workpiece after said at least one piercing portion has pierced the workpiece,

wherein said first piercing portion has first and second surfaces which meet to form a point, said first surface of said first piercing portion slopes downwardly from said point of said first piercing portion toward said axial bore and said first cutting portion, said second surface of said first piercing portion extending axially downwardly to said second cutting portion, and wherein said second piercing portion has first and second surfaces which meet to form a point, said first surface of said second piercing portion slopes downwardly from said point of said second piercing portion toward said axial bore and said second cutting portion,

said second surface of said second piercing portion extends axially downwardly to said first cutting portion.

39. (New) A punch as defined in claim 18, wherein said punch body, said at least one piercing portion and said at least one cutting portion are all integrally formed.

40. (New) A one-piece punch as defined in claim 27, wherein said punch body, said at least one piercing portion, said at least one cutting portion and said pair of projections are all integrally formed.

41. (New) A one-piece punch as defined in claim 28, wherein said pair of projections extend approximately 1/16 inch further away from said punch body than said at least one piercing portion.